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REPORT OF THE RECORDING SECRETARY.

It is gratifying to be able to report that, notwithstanding the important and, it might be supposed, disturbing building operations of the past year, the routine work of the Academy has been but little interfered with. The October meetings, indeed, had to be omitted, because, while the old Library Hall was dismantled, the new Reading Room was not quite ready. The meetings of the Academy will hereafter be held here, except on occasions of extraordinary and therefore large attendance, when the Lecture Hall on the floor below will be available. Fourteen meetings were, therefore, held during the Academic year, at which the average attendance was forty-four. Verbal communications, for the most part illustrated, were made by Messrs. F. Creighton Wellman, John W. Harshberger, F. Lynwood Garrison, Philip P. Calvert, Thomas H. Montgomery, Jr., J. M. MacFarlane, Henry Skinner, Frank F. Keeley, Arthur Erwin Brown, Edwin G. Conklin, Henry A. Pilsbry, Stewardson Brown, Gilbert Van Ingen, Edwin T. Wherry, Benjamin Smith Lyman, and the Secretary.

Thirty-six papers have been received for publication from the following authors: Henry A. Pilsbry, 4; H. A. Pilsbry and James H. Ferriss, 2; H. A. Pilsbry and E. G. Vanatta, 1; H. A. Pilsbry and C. Montague Clark, 1; H. A. Pilsbry and Y. Hirase, 1; H. A. Pilsbry and A. A. Hinkley, 1; R. V. Chamberlin, 3; Thos. H. Montgomery, Jr., 2; Stewardson Brown, 2; J. P. Moore, 2; John W. Harshberger, 2; James A. G. Rehn and Morgan Hebard, 2; F. Creighton Wellman, 1; Charles S. Boyer, 1; G. E. Crampton, 1; Nathan Banks, 1; F. J. Keeley, 1; F. W. Weymouth, 1; Robert T. Young, 1; A. E. Verrill and A. H. Verrill, 1; Burnett Smith, 1; Clarence B. Moore, 1; Aleš Hrdlička, 1; Thomas Barbour, 1; Henry W. Fowler, 1. Twenty-nine of these have appeared as portions of the sixty-first volume of the PROCEEDINGS; four have been returned to the authors, and action has been deferred on one. The two papers by Messrs. Moore and Hrdlička form the first part of the fourteenth volume of the quarto JOURNAL. The number is beautifully illustrated by text figures and eight plates of Indian pottery. The latter are superb specimens of color printing and present as faithful a representation of the objects, themselves of

quite unexpected beauty, as art can at present secure. The Academy is indebted for this continuation of the JOURNAL to the liberality and devotion to his chosen branch of science of Mr. Clarence B. Moore.

As evidence that the building operations and movings have not curtailed the work of the Publication Committee, it may be noted that the issue of the various serials now sent out under the auspices of the Academy is 129 pages in excess of that of last year, which itself was unusually productive. The number of illustrative plates, however, is 38 less than reported in 1908. The record is as follows: PROCEEDINGS, 636 pages and 27 plates; JOURNAL, 252 pages and 8 plates; ENTOMOLOGICAL NEWS, 444 pages and 22 plates; TRANSACTIONS OF THE AMERICAN ENTOMOLOGICAL SOCIETY (The Entomological Section of the Academy), 486 pages and 12 plates; MANUAL OF CONCHOLOGY, 250 pages and 26 plates, making a total of 2,068 pages and 95 plates.

The index to the publications of the Academy has been completed up to and including the volume of the PROCEEDINGS for 1905.

The short history of the Academy prepared as a contribution to the Founders' Week Memorial Volume and read at the meeting of the Academy held April 6 has been published. It will be issued in a separate edition and distributed to members, correspondents and others interested, in the hope that it may elicit comment, criticism and perhaps correction, which will render of more permanent value the detailed history in course of preparation for the Centenary of the Academy in 1912.

The accumulated stock of the PROCEEDINGS, JOURNAL and miscellaneous publications, held for sale and exchange, has been removed from the upper story of the middle building to cases prepared for storage in the basement. This is the fourth time this material has been moved to provide for the requirements of other interests since the occupancy of the corner building in 1876. It has been well said that three movings are as bad as a fire, and it is earnestly to be hoped that the present resting place will be permanent until the parts are distributed in fulfilment of their legitimate purpose as contributions to science. Incidentally an account of stock has been taken.

Ten members and five correspondents have been elected. The deaths of fourteen members and six correspondents have been announced. Messrs. J. H. Austin and Henry Pemberton have resigned. The loss sustained by the Academy in the death of Henry Cadwalader Chapman, so intimately concerned for many years with the scientific and administrative interests of the society, requires more than passing mention, and the Recording Secretary has been charged with the

preparation of a biographical notice which, it is hoped, will be ready for presentation early the coming year.

The birth of Charles Darwin and the publication of the *Origin of Species* were fittingly commemorated by a well attended meeting on February 16, at which addresses were made by the President, Dr. Arthur Erwin Brown, and Dr. Edwin G. Conklin.

A successful meeting of the American Museums Association was held in the Academy, May 13.

EDWARD J. NOLAN,
Recording Secretary.

REPORT OF THE CORRESPONDING SECRETARY.

During the year six correspondents of the Academy died and five were elected. Those deceased are Prof. Jean Albert Gaudry, Prof. Perceval de Loriol Le Fort, Prof. Rudolph Bergh, Dr. Robert E. C. Stearns, Dr. Anton Dohrn and Prof. Kakichi Mitsukuri; and those elected, Dr. John Mason Clarke, Dr. Robert F. Scharff, Dr. Albert Leon Charles Calmette, Dr. Sven A. Hedin and Prof. Oscar Drude.

In accordance with the award of last year the Hayden Gold Medal was, on December 11, transmitted to Dr. John Mason Clarke, and an acknowledgment of the same duly received, together with an official copy of a minute appreciative of the Academy's action passed by Dr. Clarke's associates on the Board of Regents of the University of the State of New York.

Among the events of importance to the scientific world in which the Academy was invited to participate were the following: The presentation of an international testimonial in honor of Amedeo Avogadro, the student of the molecular constitution of gases; the Fiftieth Anniversary of the founding of the Botanical Institute of Brandenburg; the Three hundred and fiftieth Anniversary of the foundation of the University of Geneva; the Darwin Centenary exercises of the New York Academy of Sciences; the International Congress of Mining, Metallurgy and Practical Geology; the Seventeenth International Congress of Americanists; the dedication exercises of the Lamarck Centenary memorial statue in Paris; the Jubilee of the Geological Society of Glasgow, and the presentation by President Taft of medals in recognition of their services to aeronautics to Wilbur and Orville Wright. As delegates representing the Academy at the Glasgow jubilee and the University of Geneva celebration, Sir Archibald Geikie and Dr. Auguste Forel, both correspondents, were respec-

tively appointed. While no delegates were appointed to represent the Academy on the other occasions, suitable letters of congratulation or expressions of interest were in each case forwarded.

As a mark of appreciation of our contribution toward defraying the expenses of its project, the Lamarek Memorial Committee in Paris presented the Academy with the interesting bust of the great French evolutionist that now adorns the Reading Room.

Numerous letters and notices were answered or referred to the proper officers of the Academy, as their nature required.

Following is a tabulated statement of the statistics of the correspondence for the year:

COMMUNICATIONS RECEIVED.

Acknowledging receipt of the Academy's publications, ...	209
Transmitting publications to the Academy, ...	82
Requesting exchanges or the supply of deficiencies, ...	3
Invitations to learned gatherings, ...	13
Notices of deaths of scientific men, ...	16
Circulars concerning the administration of scientific institutions, etc., ...	10
Biographies and photographs of correspondents, ...	21
Miscellaneous letters, ...	103
Total received, ...	457

COMMUNICATIONS FORWARDED.

Acknowledging gifts to the Library, ...	1,199
Acknowledging gifts to the Museum, ...	86
Acknowledging photographs and biographies, ...	14
Requesting the supply of deficiencies in periodicals, ...	93
Letters of sympathy and congratulation, etc., ...	9
Miscellaneous letters, ...	83
Annual Reports sent to correspondents, ...	234
Circular letters, ...	94
Diplomas and notices of election of correspondents, ...	13
Total forwarded, ...	1,825

Respectfully submitted,

J. PERCY MOORE.

Corresponding Secretary.

REPORT OF THE LIBRARIAN.

Notwithstanding the interruptions occasioned by the building operations and the removal of the Library, the accessions for the cur-

rent year exceed in number those of 1908. There have been received of pamphlets and periodicals 6,256, volumes 943, maps 147, and one engraving, making a total of 7,347.

They have been received from the following sources:

Societies.....	2,754	Missouri Bureau of Geology, etc....	3
I. V. Williamson Fund.....	2,611	Commissioners of Fisheries and	
Editors.....	503	Game, Massachusetts.....	3
United States Department of		Publication Committee, Academy.	3
Agriculture.....	409	South African Central Loceust	
General Appropriation.....	254	Bureau.....	3
United States Department of the		Bureau of American Ethnology....	2
Interior.....	162	Illinois Bureau of Labor Statistics	2
Authors.....	152	Albert I. of Monaeo.....	2
James Aitken Meigs Fund.....	149	Special Exchange.....	2
United States Treasury Depart-		Geological Survey of Georgia.....	2
ment.....	42	Geological Commission, Cape of	
University of Chicago.....	30	Good Hope.....	2
Thomas B. Wilson Fund.....	27	Board of Seientific Advice for	
United States Department of		India.....	2
Commerce and Labor.....	22	New Zealand Geological Survey....	2
Geological Survey of Canada.....	20	Due de Loubat.....	2
Department of the Interior of the		Superintendent of Public Doeum-	
Philippines.....	18	ments, Washington.....	2
Department of Mines, Canada....	16	Geological Bureau, Roumania.....	2
Department of Agriculture, Cape		Hawaii Agrieultural Experiment	
of Good Hope.....	16	Station.....	2
Botanical Survey of India.....	14	Guatemalan Government.....	2
Geological Survey of India.....	14	Geological Survey of Virginia.....	1
Pennsylvania Department of		Geological Survey of Oklahoma....	1
Agriculture.....	13	Henry R. Wharton.....	1
Ministry of Public Works, France	13	Philip P. Calvert.....	1
Geological Committee of Russia....	12	Department of Fisheries, Penn-	
H. A. Pilsbry.....	12	sylvania.....	1
Corps of Mining Engineers of Peru	12	Trustees of the Indian Museum....	1
Edward J. Nolan.....	12	William W. Keen.....	1
Department of Agrieulture,		Department of Mines, Nova	
Netherland India.....	11	Scotia.....	1
United States War Department....	9	Geological Survey of Iowa.....	1
Geological Survey of Japan.....	8	Geological Survey of Illinois.....	1
British Museum.....	8	Foote Mineral Co.....	1
Geological Institute of Mexieo.....	7	Department of Agriculture,	
International Union of American		Trinidad.....	1
Republics.....	6	Commission for the Scientific	
Ministry of Colonization, etc.,		Exploration of the German	
Bolivia.....	6	Seas in Kiel.....	1
Geological Survey of Wisconsin....	6	Government of India.....	1
Geological Survey of Western		Commission of Mines of Carvao	
Australia.....	6	de Pedra, Brazil.....	1
Department of Mines, New South		Bentham Trustees, Kew Gardens..	1
Wales.....	5	A. E. Outerbridge, Jr.....	1
Library of Congress.....	4	Agricultural Faculty of La Plata..	1
Department of Agrieulture in		Game Commissioners of Pennsylv-	
India.....	4	vania.....	1
Mississippi State Geological Sur-		Geological Survey of New Jersey..	1
vey.....	4	Department of Geology, Indiana..	1
Madame Léo Errera.....	4	Geological Commission of Por-	
Department of Mines, Vietoria....	4	tugal.....	1
Thomas Biddle.....	4	Colorado Geological Survey.....	1
Geological Survey of Connecticut	3		

They were distributed to the several departments of the Library as follows:

Journals.....	5,602	Mineralogy.....	28
Agriculture.....	319	Medicine.....	25
Geology.....	278	Helminthology.....	22
Botany.....	249	Mammalogy.....	22
General Natural History.....	152	Physical Science.....	18
Geography.....	130	Bibliography.....	17
Voyages and Travels.....	117	Ichthyology.....	15
Entomology.....	98	Chemistry.....	10
Anatomy and Physiology.....	73	Mathematics.....	4
Anthropology.....	66	Encyclopedias.....	1
Conchology.....	36	Unclassified.....	29
Ornithology.....	36		

Fifteen hundred and seventy-eight volumes have been bound since the last report.

Among the new books acquired during the year that are worthy of special mention are the following:

J. D. Hooker's *Botany of the Antaretic Voyage of H. M. Discovery Ships Erebus and Terror*, in seven quarto volumes.

A complete set of thirty-two volumes of the periodical *Kosmos*, published in Lemberg.

Kops and Van Eeden's *Flora Batava*, a complete set to date of twenty-three quarto volumes.

Ungarische Revue from 1885 to 1895, received from the Hungarian Academy of Sciences in response to an application for deficiencies.

Journal of the Anthropological Society of Bombay, Volumes 1 to 7.

The publications of the Scottish National Antarctic Expedition.

Transactions of the Leicester Literary and Philosophical Society from 1835 to 1895.

Volumes 1 to 13, inclusive, of *Forest and Stream*, completing our set of that periodical.

A set of the *Jahresbericht über die Fortschritte der physischen Wissenschaften (der Chemie und Physiologie)*, in thirty volumes.

The following new journals have been added to the list:

Archiv für die Geschichte der Naturwissenschaften und Technik, Leipzig.

Zeitschrift für induktive Abstammungs- und Vererbungslehre, Berlin.

Zeitschrift für Botanik, Jena.

Dörfleria, Vienna.

Mannus, Wurzburg.

Natur, Leipzig.

Præhistorische Zeitschrift, Berlin.

The current year is probably the most important in the history of

the Library, marked, as it has been, by a radical change in the manner of shelving and preserving the books.

The rear portion of the building, completed during the summer, will ultimately contain seven tiers of steel stacks for the accommodation of the Library. The five of these now in place provide more than twice the former shelving, upon which approximately 120,000 volumes can be placed, so that at the present rate of growth it is not likely that the two additional stacks will be required during the lifetime of any but the youngest members of the Academy.

The first armful of books, a collection of Academy lists, catalogues, biographies, histories and the five bound volumes of *Leidyana*, was carried to the new building at 4.30 P.M., August 25. The following day the cases in the Reading Room were filled. After an unavoidable interruption work was resumed on the 30th, and, with the help of a corps of six reliable and intelligent men, by September 22d the books were all in place, three weeks having been devoted to the work. The position of the several sections of the library had been determined on before the moving began, and they were placed at once where they are to remain, care being taken to leave space for growth. More time was, of course, thus consumed than if the books had been carried over and piled up to await a later arrangement; but the gain in the end was of importance, as the work was complete as far as it went. The books were always accessible, and, as a matter of fact, the use of the Library was not interfered with for a single hour.

The cases have been numbered, and the several sections are indicated by neatly lettered signs at the ends of the stacks. A printed guide to the arrangement will further assist those consulting the collection. It has not, so far, been necessary to make any special legislation regarding admission to the stacks. Those working in the Academy seem to have no difficulty in finding what they want, and books desired by casual readers are promptly supplied by the attendants. The catalogues will be revised as soon as time can be secured for the work.

There has been but one departure from the old classification: the special journals have been grouped under their subject headings; transactions of general societies and other publications dealing with more than one branch of science being arranged geographically, as before.

The new arrangement, although sacrificing in some minor particulars the convenience so enthusiastically recognized by all who had access to the old hall, is eminently satisfactory. Three well-lighted and convenient apartments between the Reading Room and the stacks have been assigned for the use of the Recording Secretary and Librarian and his Assistant.

The spacious Reading Room has been surrounded by bookcases, in which are placed the books most likely to be frequently called for—a portion of those on general natural history, recent accessions, dictionaries and bibliography. With the exception of the cases for the temporary reception of new books, this is more a matter of furnishing than of library convenience, as no difficulty is experienced in securing any work desired from the stacks, which are sufficiently lighted by the windows in ordinarily fine weather, the electric lights provided in the aisles being required only on cloudy days and late in the afternoon.

A room on the stairway leading to the Lecture Hall has been appropriated for the storage of duplicates and of journals not immediately germane to the work of the Academy.

The rooms vacated by the Library, to the east of the Race street entrance, have, on the recommendation of the Council, been assigned for the use of the State Department of Health during the term of office of the present State Commissioner, the President of the Academy, and are now so occupied.

There has been no interruption of current work. Books have been ordered, received and catalogued, exchanges have been made and accessions displayed as usual on the Library tables for the use of those compiling bibliographies or desirous of keeping up their knowledge of the progress of science.

Acknowledgment is due the Assistant Librarian, William J. Fox, for most intelligent and efficient service in the moving of the books to the new building and of the stock of publications to the new storage cases, as well as for the faithful discharge of his current duties in connection with the Library and the Publication office.

We are indebted to the Free Library of Philadelphia for the loan of the trucks used in the transportation of the books to the new building.

It is believed that the portion of the year's work with which the Library Committee and the Librarian are charged may be regarded as a subject of warm congratulation.

EDWARD J. NOLAN,
Librarian.

REPORT OF THE CURATORS.

The additions and alterations to the Academy buildings, begun in the spring of 1908 under an appropriation of \$150,000 from the Commonwealth of Pennsylvania, have been completed.

The entrance from Race street has been remodeled and now presents

a commanding hallway which leads directly to the main Museum building, through the space formerly occupied by the old Lecture Hall.

The stairways in the main Museum building have been removed to the Nineteenth street entrance, from which a new vestibule has been constructed, shut off from the galleries of each floor by fire-walls and automatic fire-doors.

On the lot situated at Nineteenth and Cherry streets, 50 x 130 feet in size, has been erected a handsome fireproof building, now occupied by the Hall of the Academy, the Library stack and Reading Room.

The third floor, with the top floor of the main Museum building, have been divided into a number of study rooms and laboratories. All are reached by an electric elevator.

In the old Museum all the iron columns have been fireproofed and fire escapes provided to comply with the legal requirements.

New vaults for the storage of the alcoholic collections have been constructed and the collections transferred to them.

The increased room and accommodations now provided have long been needed for the protection and accommodation of the invaluable Library and Museum of the Academy and the collections of the Commonwealth of Pennsylvania and the American Philosophical Society, deposited in its keeping.

At this year's session of the State Legislature an additional appropriation of \$60,000 was made to the Academy, with which it is proposed to encase the walls of the original greenstone building, which are becoming badly weathered, with brick and terra cotta, and to add such terra cotta facings to the middle wing as will make the entire building uniform in appearance.

The Museum, which had been closed to the public during the alterations, was reopened early in the year, and much of the time of the Museum staff has been devoted to the cleansing and rearrangement of the specimens.

A radical rearrangement has been effected on the mammal floor and many of the osteological specimens temporarily removed from exhibition.

All the water birds were removed while the cases were being cleansed and repainted and were then rearranged.

The immense series of jars containing the alcoholic collections have been thoroughly cleansed before being arranged in the new vaults.

Notwithstanding this unusual amount of routine work, considerable local field work was done by members of the Museum staff and several

more extended trips were made. Largely through the liberality of Mr. Morgan Hebard, Mr. Rehn was enabled to accompany him on a trip through the Western States, and a large collection of Orthoptera and some other specimens were secured.

Through the Esther Hermann Research Fund of the New York Academy of Sciences, Mr. Stewardson Brown was enabled to make another botanical exploration of Bermuda during May in the interests of the New York Botanic Garden and this Academy. Dr. J. P. Moore spent the summer collecting marine invertebrates at Martha's Vineyard and Woods Hole. Mr. Clarence B. Moore has continued his explorations of the Indian mounds of the Southern States, and has added many valuable specimens to the collection made by him since 1893. The Moore collection now contains over 5,000 specimens, all systematically arranged and labelled by Mr. Moore.

Among the more important accessions of the year may be mentioned the Clemens collection of Philippine birds, the Hinkley collection of Mexican mollusca, a collection of Brazilian insects made by Miss H. B. Merrill—all secured by purchase—and the Commons Herbarium, an unusually complete collection of the flora of Delaware, made by Mr. Albert Commons, and presented to the Academy by his nephews, Messrs. Frank W. and Howard W. Commons.

One mahogany and plate glass exhibition case has been added to the bird hall, and forty-three storage cases and 158 Schmidt insect boxes have been purchased.

In addition Dr. J. P. Moore has cared for the collection of annelids and Mr. H. W. Fowler the fishes, while Miss H. N. Wardle has arranged portions of the archæological specimens.

To Mr. Sam'l S. Van Pelt in the Herbarium and to Mr. E. T. Cresson, Jr., in the Entomological department the Curators are indebted for valuable assistance.

Specimens have been loaned during the year to A. S. Hitchcock, C. J. Pennock, Dr. Ludwig Neumayer, J. H. Fleming, F. C. Baker, Mary J. Rathbun, Robert Ridgway, Dr. Paul Bartsch, H. C. Oberholser, Merritt Cary and W. W. Eggleston.

SAMUEL G. DIXON,
Curator.

REPORT OF THE DEPARTMENT OF MOLLUSCA.

Work during the past year has been chiefly directed to the preparation, determination and labelling of new material added to the collections, and to the preparation of an illustrated monograph on the

family *Partulida*, which has been published in the *MANUAL OF CONCHOLOGY*.

Very large accessions of the mollusca of Louisiana and southeastern Arkansas we owe to Mr. Clarence B. Moore. Mr. Stewardson Brown has further augmented the series from Bermuda, and the study of Arizona snails collected by J. H. Ferriss and the Curator has nearly reached completion; reports thereon are now in course of publication by the Academy.

The shells collected by Mr. A. A. Hinkley in Mexico have been determined, and the new forms described in several papers.

Mr. John B. Henderson, Jr., has contributed a series of Cuban shells collected this year, and Dr. Arnold Ortmann gave a set of western Pennsylvania freshwater mussels, especially valuable on account of the rapid destruction of the faunas of these streams by mine water. A large series of mollusks from Tonkin has been purchased, in order to afford material for comparison with those of China, Korea and Japan, which the Curator is working upon.

Accessions hardly less valuable have been received from many correspondents of the Department, as noted in the *Additions to the Museum*.

H. A. PILSBRY,

Special Curator, Dept. of Mollusca.

REPORTS OF SECTIONS.

BIOLOGICAL AND MICROSCOPICAL SECTION.

The Section has held nine regular meetings during the year, with an average attendance of nine members. Ten informal meetings have also been held.

The Conservator reports the donation of six boxes of slides from the estate of the late Dr. Henry C. Chapman.

The work of the year consisted chiefly in the exhibition and description of mounted slides and material by each member present, and in the exchange of specimens for mounting, among which may be mentioned a valuable series of about seventy rare minerals in microscopic crystals distributed by Mr. Keeley.

Among the papers presented are the following: "Microscopical Image Formation," by Mr. F. J. Keeley, published in the *PROCEEDINGS*; "The Hookworm Disease," by Dr. T. S. Stewart.

Mr. Palmer described a new form of *Pinnularia* which he has named *Pinnularia socialis*, found in groups of four.

Mr. Van Sickle devised a new form of opaque mounting slide, and, at the request of members, several thousand were manufactured from his design for general use.

Mr. Shulze discovered several new forms of *Diatomacæ* in the Barbadoes deposit, one of which has been named and described by Mr. Boyer in the PROCEEDINGS.

Mr. Schumo presented various specimens and gave a talk on Mosses, illustrated with lantern slides.

Communications were also made by Mr. Bilgram on *Myxomycetes*; Dr. Owen, on salt solutions; Mr. Davies, on various vegetable preparations; Mr. Van Sickle, on the crystallization of Platinum; Mr. Boyer, on local diatoms, and by Messrs. Keeley, Rothermel, Ray and other members, on miscellaneous subjects.

An increased interest is apparent in the preparation of specimens and in the manipulation of the microscope and much original work has been accomplished during the year.

The officers for the year 1910 are as follows:

<i>Director,</i>	J. Cheston Morris, M.D.
<i>Vice-Director,</i>	T. Chalkley Palmer.
<i>Recorder,</i>	Charles S. Boyer.
<i>Corresponding Secretary,</i>	Silas L. Schumo.
<i>Treasurer,</i>	Thomas S. Stewart, M.D.
<i>Conservator,</i>	F. J. Keeley.

CHARLES S. BOYER,

Recorder.

ENTOMOLOGICAL SECTION.

The usual meetings of this Section have been held with an average attendance of nine persons. During the year upwards of 3,000 specimens have been added to the collection. Eight new cases and 158 boxes have been purchased to accommodate the growth of the cabinet. The orders Hemiptera and Neuroptera and the family Tenthredinida of the order Hymenoptera have been rearranged. Part of the American Rhopalocera has been transferred to new cases. The publications of the Section have been successfully continued. One member and two associates have been elected.

At a meeting held December 23 the following officers were elected:

<i>Director,</i>	Philip Laurent.
<i>Vice-Director,</i>	H. W. Wenzel.
<i>Treasurer,</i>	E. T. Cresson.
<i>Secretary,</i>	E. T. Cresson, Jr.
<i>Conservator and Recorder,</i>	Henry Skinner, M.D.
<i>Publication Committee,</i>	E. T. Cresson, E. T. Cresson, Jr.

BOTANICAL SECTION.

Early in the year the work of putting the species of flowering plants into covers was completed, which will prove not only a convenience in studying, but will also secure a decrease in the possible breakage of specimens.

The most notable addition during the year has been the Albert Commons Herbarium of Delaware plants, representing his collecting during half a century. It is probably the most complete series of the flora of the State, including not only the flowering plants and ferns, but also the lower forms, fungi, etc. The collections were presented to the Academy by Messrs. Frank W. and Howard W. Commons, of Minneapolis, Minn.

Other donations include a collection of 50 species of Bucks County, Pa., *Cratægus* from Dr. C. D. Fretz; 160 *Cratægus* and other trees and shrubs from the Arnold Arboretum; 250 specimens of plants from the eastern United States from E. B. Bartram, and smaller collections, aggregating about 150 specimens, which will be noted in detail in the *Additions to the Museum*.

The Section has purchased 500 specimens of California and Nevada plants from A. A. Heller; 40 specimens of *Cratægus* from Willard W. Eggleston and 100 Mexican mosses from C. G. Pringle.

The Conservator spent the time from May 22 to June 2 of the present year in the Bermudas, where a collection of about 250 plants was made, and, though not large in species, enabled him to determine some uncertain records, besides adding a number to the known flora of the islands. The results of this and two previous trips are embodied in a paper in the current number of the PROCEEDINGS.

The Philadelphia Botanical Club has continued to hold its meetings in the herbarium of the Academy during the year, and through the energy of its members 2,100 sheets have been added to the local collection, in the care of which Mr. Samuel S. Van Pelt has continued his valuable services as Curator.

Acknowledgment is made of the services of Miss Ada Allen as assistant in the herbarium during the year.

At the annual meeting of the Section the following were elected as officers for the coming year:

<i>Director,</i>	.	.	.	.	.	Benjamin H. Smith.
<i>Vice-Director,</i>	.	.	.	.	.	Joseph Crawford.
<i>Secretary and Recorder,</i>	.	.	.	.	.	Charles S. Williamson.
<i>Treasurer and Conservator,</i>	.	.	.	.	.	Stewardson Brown.

Respectfully submitted,
STEWARDSON BROWN,
Conservator.

THE MINERALOGICAL AND GEOLOGICAL SECTION.

The Section held seven meetings in 1909, with an average attendance of six. Communications were made by Prof. O. C. S. Carter, on earthquakes; Dr. E. T. Wherry, on fossil plants at Holicong, Bucks County, with a report on them by Dr. David White; Mr. T. C. Palmer, on minute beryls at Avondale, Delaware County; B. S. Lyman, on the need of instrumental surveying in practical geology, and on advantages of not exaggerating the vertical scale in geological cross-sections; Col. Joseph Willcox, on fossil elephants, Glyptodon, manatee and horses in Florida; Mr. F. J. Keeley, on asteriated sapphire from Ceylon; Miss E. Walter, on sub-fossil Sequoia in San Francisco.

The Section also met in conjunction with the Academy on the evening of May 18th, and made through its members three communications to the meeting.

There were six field excursions of the Section, with an average attendance of about 29. On all the excursions, except the third, the parties visited crystalline rocks and their minerals, namely: (1) Between Woodlane and Ardmore, Montgomery County; (2) between Elwyn and Newtown Square, Delaware County; (3) New Red rocks and trapdikes, between Camp Hill and Three Tuns, Montgomery County; (4) near Moylan, Strath Haven, Avondale and Crum Creek, Delaware County; (5) near Cynwyd, Mill Creek and Bryn Mawr, Montgomery County; (6) near Glen Mills, Lenni, Chester County, and Blackhorse, Delaware County.

Besides the meetings and excursions of the Section, there was, by its invitation, a numerously attended meeting of geologists of the northeastern part of the United States held at the Academy on the afternoon and evening of April 23d, at which six highly valuable communications were read, followed, the next day, by a very profitable field excursion of 23 participants, under the guidance of Prof. Bascom.

to typical places of pre-Cambrian and early Paleozoic rocks, from Lafayette up the Schuylkill to Norristown, and thence to Henderson, Gulf Mills and Bryn Mawr.

The membership of the Section has increased during the year by three associate members. The field excursions lead to joining it as associate members; and sometimes immediately, or later through interest in the meetings, to becoming members of the Academy. The full membership is now 25 members and 15 associate members, 40 in all.

The following officers of the Section have been elected for the year 1910:

<i>Director,</i>	.	.	.	.	.	Benjamin Smith Lyman.
<i>Vice-Director,</i>	.	.	.	.	.	Frank J. Keeley.
<i>Recorder and Secretary,</i>	.	.	.	.	.	Silas L. Schumo.
<i>Treasurer and Conservator,</i>	.	.	.	.	.	George Vaux, Jr.

Respectfully submitted by order of the Section.

BENJAMIN SMITH LYMAN,

Director.

ORNITHOLOGICAL SECTION.

Work in the Ornithological department has been seriously hampered during the past year by the alterations to the top floor of the Museum, which necessitated the disarrangement of most of the cases for nearly six months, while the demands upon the Conservator's time in looking after other departments of the Museum and the absence of Mr. Rehn in the West also interfered with the work of the department.

The cases have now, however, been permanently placed, all the drawers examined and the specimens arranged, while the rooms have been thoroughly cleaned.

The remainder of the Tristram and Porter collections, comprising several thousand skins, have been systematically distributed, and the Van der Pol collection has been catalogued, while the *Limnicolæ* or shore birds have been critically studied, reidentified and arranged in standard metal cases.

It was found necessary to remove a large part of the exhibition series from the cases, so as to permit of the cleansing of both specimens and cases. A portion of this work has been accomplished, and one new exhibition case secured. For the study collection of skins ten additional metal and four large wooden cases were procured, which enables us for the first time to place the entire study series in

standard cases. A number of valuable additions to the collection have been made during the year, the most important being the Clemens specimens from Mindanao, Philippine Islands.

The Delaware Valley Ornithological Club and the Pennsylvania Audubon Society have held their meetings in the Ornithological rooms during the year, and have done much to further the interests of the department. To Mr. J. A. G. Rehn the Conservator is indebted for valuable assistance in labelling and cataloguing.

The officers elected at the annual meeting, December 2, 1909, are:

<i>Director,</i>	.	.	.	.	.	Spencer Trotter, M.D.
<i>Vice-Director,</i>	.	.	.	.	.	George Spencer Morris.
<i>Corresponding Secretary,</i>	.	.	.	.	.	William A. Shryock.
<i>Recorder,</i>	.	.	.	.	.	Stewardson Brown.
<i>Conservator and Treasurer,</i>	.	.	.	.	.	Witmer Stone.

WITMER STONE,
Conservator.

The annual election of Officers, Councillors and Members of the Committee on Accounts to serve during 1910 was held, with the following result:

PRESIDENT,	.	.	.	.	Samuel G. Dixon, M.D., LL.D.
VICE-PRESIDENTS,	.	.	.	.	Arthur Erwin Brown, Sc.D., Edwin G. Conklin, Ph.D., Sc.D.
RECORDING SECRETARY,	.	.	.	.	Edward J. Nolan, M.D.
CORRESPONDING SECRETARY,	.	.	.	.	J. Percy Moore, Ph.D.
TREASURER,	.	.	.	.	George Vaux, Jr.
LIBRARIAN,	.	.	.	.	Edward J. Nolan, M.D.
CURATORS,	.	.	.	.	Arthur Erwin Brown, Sc. D., Samuel G. Dixon, M.D., LL.D., Henry A. Pilsbry, Sc.D., Witmer Stone.
COUNCILLORS TO SERVE THREE YEARS,	.	.	.	.	Philip P. Calvert, Ph. D., Thomas Biddle, M.D., Frederick Prime, Frank J. Keeley.
COMMITTEE ON ACCOUNTS,	.	.	.	.	Charles Morris, Samuel N. Rhoads, John G. Rothermel, Thomas H. Montgomery, Ph.D., Frank J. Keeley.

COUNCIL FOR 1910.

Ex-officio.—Samuel G. Dixon, M.D., LL.D., Edwin G. Conklin, Ph.D., Sc.D., Arthur Erwin Brown, Sc.D., Edward J. Nolan, M.D., J. Percy Moore, Ph.D., George Vaux, Jr., Henry A. Pilsbry, Sc.D., Witmer Stone.

To serve three years.—Philip P. Calvert, Ph.D., Thomas Biddle, M.D., Frederick Prime, Frank J. Keeley.

To serve two years.—Charles B. Penrose, M.D., Charles Morris, Henry Tucker, M.D., Spencer Trotter, M.D.

To serve one year.—Thomas H. Fenton, M.D., John Cadwalader, Edwin S. Dixon, Henry Skinner, M.D.

CURATOR OF MOLLUSCA,	.	.	Henry A. Pilsbry, Sc.D.
ASSISTANT LIBRARIAN,	.	.	William J. Fox.
ASSISTANTS TO CURATORS,	.	.	Henry Skinner, M.D., Stewardson Brown, J. Percy Moore, Ph.D., Edward Vanatta, Henry W. Fowler, James A. G. Rehn.
ASSISTANT,	.	.	H. Newell Wardle.
TAXIDERMIST,	.	.	David N. McCadden.
<i>Jessup Fund Students,</i>	.	.	H. Newell Wardle, Ezra T. Cresson, Jr.
<i>Janitors,</i>	.	.	Charles Clappier, Daniel Heckler, James Tague, Jacob Aebley, Adam E. Heckler.

ELECTIONS DURING 1909.

MEMBERS.

January 19.—George H. Clapp, Charles M. B. Cadwalader, Herbert Fox, M.D., William Redwood Wright, Lewis W. Steinbach, M.D.

March 16.—William Welsh Welsh.

April 20.—John Gribbel, Mrs. Elizabeth B. Gribbel.

November 16.—Theodore de Thodorovitch, LL.D., James A. G. Rehn.

CORRESPONDENTS.

January 19.--Albert Calmette, Ph.D., of Lille; John Mason Clarke, LL.D., of Albany; Sven A. Hedin, Ph.D., of Stockholm; Robert F. Scharff, Ph.D., of Dublin.

November 16.—Oscar Drude, of Dresden.

ADDITIONS TO THE MUSEUM.

MAMMALS.

C. R. BIEDERMAN. Skin of Civet Cat (*Bassariscus astutus flavus*), Arizona

J. G. DILLEN. Skin of Brewer's Mole (*Parasealops breweri*), Bucks County, Pa.

HEBARD-ACADEMY EXPEDITION OF 1909. One young Rabbit (*Lepus* sp.), Montana.

MISS DORA KEENE. Skull of Leopard (*Felis pardus*), Burma.

B. W. ORIN. Skull of Woodchuck (*Marmotta monax*), Chester County, Pa.

ROBERT SHEARER. Skull of Horse (*Equus caballus*).

JOHN B. STETSON CO. Skin of Duckbill (*Ornithorhynchus anatinus*).

WITMER STONE. Skull of varying Hare (*Lepus americanus virginianus*), Sullivan County, Pa.

ZOOLOGICAL SOCIETY OF PHILADELPHIA. Specimens prepared as follows: Mounted, Panda (*Ailurus fulgens*), Cape Hunting Dog (*Lycan pictus*). Skin and skeleton, Red Langur (*Presbytis rubicundus*), Asiatic Tapir (*Tapirus indicus*), Brazilian Ocelot (*Felis chibiquazou*); skin and skull, Fishing Cat (*Felis viverrina*), Senegal Galago (*Galago senegalensis*); skin, Mexican Deer (*Odocoileus* sp.); skeleton, European Lynx (*Lynx lynx*); skull, Arctic Fox (*Vulpes lagopus*).

BIRDS.

MISS ANNA BUSCH. Razor-billed Auk (*Alca torda*), Sea Isle City, N. J.

W. B. CRISPIN. European Starling (*Sturnus vulgaris*), Salem, N. J.

J. W. HOLMAN. Adult Black Duck (*Anas rubripes*) and young (mounted), Tuckerton Bay, N. J.; Black Hawk (*Archibuteo lagopus sancti-johannis*), Stafford's Forge, N. J.

LUTHER D. LOVEKIN. Loon (*Gavia imber*), Wayne, Pa.

JOSHUA PARKER. Dovekie (*Alle alle*), Parkertown, N. J.

MISS WIEGAND. Birds' eggs.

WM. D. WINSOR. Swan (*Olor columbianus*).

ZOOLOGICAL SOCIETY OF PHILADELPHIA. Mounted, single wattled Cassowary (*Casuarius uniappendiculatus*). Skins, spotted Eagle Owl (*Bubo maculosus*), Satin Bower-bird (*Ptilonorhynchus violaceus*); skin and skeleton, Cassowary (*Casuarius casuarius*); skeletons, South African Ostrich (*Struthio australis*), Crowned Hornbill (*Anthracoceros coronatus*).

DELAWARE VALLEY ORNITHOLOGICAL CLUB. Several nests and eggs added to the local collection.

PURCHASED. The Clemens collection of Birds from the Island of Mindanao, P. I.

REPTILES AND BATRACHIANS.

O. H. BROWN. Red Salamander (*Spelerpes ruber*), Cape May, N. J.

J. T. BRYAN. Young Black Snake (*Bascanion constrictor*), Pitman, N. J.

H. W. FOWLER. Musk Turtle (*Kinosternon*) and Toad (*Bufo*), Cape May, N. J.; several collections of reptiles and amphibians, New Jersey and Pennsylvania.

H. W. FOWLER and H. L. MATHER, JR. One Frog (*Rana*), Pitman, N. J.

H. W. FOWLER and H. L. MATHER, JR. Collection of reptiles, Montgomery County, Pa.

JOHN H. GREENWOOD. Painted Turtle (*Chrysemys picta*), Chestertown, Md.

B. W. GRIFFITHS and H. W. FOWLER. Collection of amphibians and reptiles, Ateo, N. J.

H. W. HAND and H. W. FOWLER. Collection of reptiles and amphibians, Cape May County, N. J.

GEORGE W. HARPER. DeKay's Snake (*Storeria dekayi*).

HEBARD-ACADEMY EXPEDITION OF 1909. Fifty-nine reptiles and batrachians, Western United States.

J. W. HOLMAN. Three snakes, Stafford's Forge, N. J.

C. J. HUNT. DeKay's Snake (*Storeria dekayi*), Tinicum, Pa., two Dusky Salamanders (*Desmognathus fusca*), Frankford, Pa.

T. D. KEIM. *Diadophis punctatus*, New Jersey.

H. L. MATHER, JR. Garter Snake (*Thamnophis sirtalis*).

DR. H. A. P. NEIL. Water Snake (*Natrix sipedon*), Holmesburg, Pa.

JOSEPH PARKER. Ground Snake (*Carphophiops amoenus*), Stafford's Forge, N. J.

DR. H. A. PILSBRY. Two Salamanders (*Plethodon*) and one Tree Frog (*Hyla pickeringi*), Bartonsville, Pa.; two Speckled Turtles (*Chelopus guttatus*), Swede's Run, N. J.

PURCHASED. Six western Painted Turtles (*Chrysemys marginatus*).

EVAN RHOADS. Ribbon Snake (*Thamnophis saurita*), Sussex County, N. J.

DR. G. S. ROBINSON. Two Snakes (*Lampropeltis dolia* *triangulus* and *Thamnophis sirtalis*), Pennsylvania and New Jersey.

MR. W. P. SEAL. Red-bellied Terrapin (*Pseudemys rubriventris*), New Jersey; local Frogs and tropical *Hyla*.

J. F. STREET. Copperhead (*Agkistrodon contortrix*), Frenchtown, N. J.; Sticky Salamander (*Plethodon glutinosus*), Kingwood, N. J.

E. G. VANATTA. *Rana pipiens*, Ocean City, N. J.

ZOOLOGICAL SOCIETY PHILADELPHIA. Mexican Heloderma (*Heloderma horridum*).

R. W. WEHRLE. Several lots of reptiles and amphibians from Indiana and Pennsylvania.

FISHES.

DR. C. C. ABBOTT. Several collections of fishes, Bordentown, N. J.

DR. BELLWS. Chub (*Semotilus bullaris*), Montgomery County, Pa.

C. H. CONNER. *Seriola zonata*.

W. P. DAVIS. Two *Bufo fowleri*, New York.

H. W. FOWLER. Seven lots of fishes, New Jersey and Pennsylvania.

H. W. FOWLER and B. W. GRIFFITHS. Collection of fishes, Chester County, Pa.

H. W. FOWLER and H. L. MATHER, JR. Collection of fishes, Pitman, N. J.

- H. W. FOWLER and H. L. MATHER, JR. Collection of fishes, Montgomery County, Pa.
- H. W. FOWLER and D. N. McCADDEN. Collection of fishes, Ocean City, N. J.
- E. N. FOX. Skate (*Raja ocellata*), Sea Isle City, N. J.
- W. J. FOX. Eel Pout (*Zoarces anguillaris*), Sea Isle City, N. J.; Angler (*Lophius*); *Paralichthys dentatus*, Leaming, N. J.; *Echeneis*, *Mugil* and *Leiostomus*, Sea Isle City, N. J.; two Hake (*Merlucius*).
- H. W. HAND. One *Scienops ocellatus*, Cape May, N. J.
- H. W. HAND. Sunfish (*Eupomotis*) from salt water, Cape May, N. J.
- HEBARD-ACADEMY EXPEDITION OF 1909. Two! Flying Fish (*Cypselurus californiensis*), Santa Catalina Island, Cal.
- T. D. KEIM and H. W. FOWLER. Several collections of fishes, Pennsylvania and New Jersey.
- T. D. KEIM. Small collection of fishes, New York.
- DAVID McCADDEN. Tautog (*Tautoglabrus adspersus*), Ocean City, N. J.; *Paralichthys dentatus*, Ocean City, N. J.
- H. L. MATHER, JR. Collection of fishes, Maryland.
- H. L. MATHER, JR. *Petromyzon marinus*, Maryland.
- DR. R. J. PHILLIPS. Eight collections of fishes, Corson's Inlet, N. J.
- DR. R. J. PHILLIPS and H. W. FOWLER. Small collection of fishes, Corson's Inlet, N. J., and Tinicum, Pa.
- R. POTTER. Two Swordfish swords, Gloucester, Mass.
- PURCHASED. Specimens of *Dasyatis* and *Raja*.
- DR. G. S. ROBINSON. *Spheroides maculatus*.
- F. M. SIGGINS. *Umbra*, Meadville, Pa.
- EUGENE SMITH. One Cut-lip Minnow (*Exoglossum maxillingua*), Hoboken, N. J.
- U. S. NATIONAL MUSEUM. Five specimens of *Notropis hudsonius selenc*.
- E. G. VANATTA. Sunfish (*Enneacanthus*), Chestertown, Md.
- R. W. WEHRLE. Collection of fishes, Indiana, Pa.
- H. A. WIDDIFIELD. Cow-nosed Ray (*Rhinoptera*), Great Egg Harbor, N. J.

INSECTS.

- W. BEUTENMUELLER. Six Cynipidæ, United States.
- F. E. BLAISDELL. Eight *Agabus lineolus*, California.
- IGNACIO BOLIVAR. Fifty-five Orthoptera, Spain and Africa (exchange).
- W. E. BRITTON. Thirty-five insects, United States.
- D. M. CASTLE. Eighteen Coleoptera, United States.
- A. N. CAUDELL. Three Orthoptera, Georgia and Virginia.
- PAUL CHENEY. One Mantis, Florida.
- E. T. CRESSON, JR. Ninety-eight Diptera, United States; eleven Lepidoptera, New York; seven Neuroptera, New York; twenty-four Diptera, New York; fifty-eight Hymenoptera, New York; three Odonata, New York; six Orthoptera, New York; fifty insects, California.
- W. T. DAVIS. Fourteen Orthoptera, Newfoundland and New Jersey.
- H. T. FERNALD. One Orthoptera, British Honduras.
- H. W. FOWLER. Four insects, New Jersey.
- G. M. GREENE. Thirty-five Hymenoptera, Philadelphia; two hundred and fifty Coleoptera, Germany.

MORGAN HEBARD. Fifty-three Coleoptera, United States; one hundred and twenty-four insects, United States; one hundred and forty Hymenoptera, Michigan; forty-two Orthoptera, Florida; forty-four Orthoptera, Arizona; three hundred and fifty-seven Orthoptera, Western States and Florida; thirty-two Orthoptera, Colorado, Utah and Yellowstone Park.

HEBARD and REHN. One thousand three hundred and seventy-five Orthoptera, Academy Expedition; ten Orthoptera, United States.

F. M. JONES. Thirty-one Orthoptera, Bermuda.

C. W. JOHNSON. Thirty-six Diptera, United States.

R. R. MYERS. Two Hymenoptera, Pennsylvania.

PURCHASED. Five hundred and twenty-one Orthoptera, Tropical America and Africa; two hundred and forty Orthoptera, Para, Brazil; one hundred Orthoptera, Amboina; five hundred and twenty-five Orthoptera, Natal.

J. A. G. REHN. Seven Orthoptera, New Jersey.

S. A. ROHWER. Twenty Hymenoptera, Colorado.

HENRY SKINNER. Twenty-one *Argynnis*, Utah; twenty-one insects, New Jersey; eighteen Lepidoptera, New Mexico; twenty-seven Lepidoptera, North Carolina; thirteen Lepidoptera, California; eight Coleoptera, Pennsylvania; six *Satyris pegala*, Alabama.

J. B. SMITH. One Orthoptera, New Jersey.

H. A. SURFACE. Two Lepidoptera, Pennsylvania.

J. F. TRISTAN. Twenty-five Orthoptera, Costa Rica.

F. WEIGAND. *Cucullia phila*, Pennsylvania.

H. A. WENZEL. Four *Diplotaxis*, Arizona; two *Cicada*, Philadelphia; two Coleoptera, Canada.

JOHN WOODGATE. Forty-one Hymenoptera, New Mexico; ten Orthoptera, New Mexico; fourteen Neuroptera, New Mexico; twenty-three Diptera, New Mexico; nineteen Coleoptera, New Mexico.

RECENT MOLLUSCA.

JOHN A. ALLEN. Nine lots of Tahitian shells.

JOSHUA BAILY, JR. *Viviparus* from lake in Fairmount Park.

F. C. BAKER. Cotypes of *Lymnaea nashotahensis*; *Pisidium*.

MRS. L. BAKER. *Polygyra umulifera*, Osprey, Florida.

S. S. BERRY. Lot of Californian freshwater and land shells.

J. CHESTER BRADLEY. Several lots of *Pisidium* from British Columbia.

STEWARTSON BROWN. Eighty-nine trays of Bermudan shells.

L. R. CARY. Five species shells from Delaware and Raritan Canal.

G. H. CLAPP. Five species land shells; cotype of *Holospira bartschi*.

W. H. DALL. Species of *Holospira*, *Epirobia* and *Aperostoma*.

L. E. DANIELS. *Pisidium* and *Physa* from Arizona.

JAMES H. FERRISS. Two hundred and thirty-four lots of land shells from Arizona.

W. H. FLUCK. Sixteen lots of Nicaragua shells.

H. W. FOWLER, R. J. PHILLIPS and H. L. MATHER. Fifteen lots Pennsylvania and New Jersey shells.

W. J. FOX. Series of eighteen marine mollusks from Sea Isle City, N. J.

JOHN H. GREENWOOD. Jug with oysters growing in and upon it.

- GEORGE W. HARPER. *Lampsilis parvus* and *tetralasmus*, Dallas, Texas.
 MORGAN HEBARD and J. A. G. REHN. Eleven lots of shells from Montana, etc.
 J. B. HENDERSON, JR. Sixty-three lots of Cuban land shells.
 A. A. HINKLEY. One hundred and ninety-eight lots of Mexican shells.
 Y. HIRASE. Eighty-three lots of Japanese shells.
 L. A. KEENE. Collection of Unionidæ, Fox River, Ill.
 MRS. A. F. KENYON. One hundred and thirty-six lots marine mollusks Australia.
 H. W. LERMOND. *Bela* and *Nucula* from Maine.
 H. N. LOWE. *Chlorostoma* and *Helices* from California.
 JOHN H. MATTHEWS. *Xesta citrina*, Amboyna.
 WILLIAM G. MAZYCK. *Sonorella* from Salt River Mountains, Arizona; *Helicella terrestris*, Charleston, S. C.
 CLARENCE B. MOORE. Two hundred and eighty-five lots of shells from Louisiana and Arkansas.
 A. E. ORTMANN. Seventy-eight lots Unionidæ, Western Pennsylvania.
 W. H. OVER. Twenty-five lots fresh-water shells, South Dakota.
 MAJ. J. PEILE. *Helix pisana* and *Zonitoides bermudensis*, Bermuda.
 H. A. PILSBRY. One hundred and eighty-six lots Arizona shells; twenty-three species from Monroe County, Pa.
 EVAN RHOADS. Twenty-five lots of shells from northern New Jersey.
 S. N. RHOADS. Sixty-five lots of shells from Adirondacks, etc.
 S. L. SCHUMO. Thirty lots of shells from Santiago, Cuba.
 ALVIN SEALE. Fifteen lots of shells from Gulf of Davao, Mindanao.
 H. H. SMITH (purchased). Thirty-three lots Alabama shells.
 V. STERKI. Five species of Pupillidæ.
 WITMER STONE. Six species of land shells from Sullivan County, Pa.
 U. S. NATIONAL MUSEUM. *Viviparus* from Mindanao; *Polygyra* from Mexico.
 E. G. VANATTA. Six lots of shells, Pennsylvania and New Jersey.
 GEORGE WAGNER. *Ianthina exigua*, California.
 BRYANT WALKER. Cotypes of *Planorbis bicarinatus royalensis*, *Lymnæa pilsbryana*, *L. petoskeyensis* and *Somatogyra virginicus*. *Succinea*, *Viviparus*, etc.
 R. W. WEHRLE. Three species land shells, Indiana County, Pa.
 H. W. WENZEL. *Planorbis bicarinatus*, Scotia Junction, Ont.
 J. E. WHITFIELD. *Pæcilonites*, Bermuda.
 A. P. WILLITS. Six lots shells from Santo Domingo.
 HELEN WINCHESTER. Seven species land shells, Susquehanna, Pa.
 PURCHASED. Four hundred and ninety-four species of exotic mollusks.

WORMS.

- STEWARTSON BROWN. Two species of Oligochaeta.
 DR. H. C. CHAPMAN. *Phyllobothrium*.
 ERICH DAECKE. *Ascaris megaloccephalus*.
 H. W. FOWLER. *Macrobodella decora*.
 DR. J. PERCY MOORE. Three hundred and twenty-nine bottles of Annelids; eighteen bottles of Polychaeta, California.
 WALTER PFEIFFER. Blood worm (*Caudina arenata*), Townsend's Inlet, N. J.

- DR. H. A. PILSBRY. Two species of *Ascaris* and *Oligoehæta*.
J. A. G. REHN. *Ascaris* sp.
E. G. VANATTA. *Lumbricus*, *Euchytræus* and *Helodrilus*.
U. S. NATIONAL MUSEUM. Fifty-six bottles of *Polyehæta*, Nova Scotia and Labrador.

OTHER INVERTEBRATES.

- STEWARTSON BROWN. Two jars of Centipedes, Bermuda.
ARCHIE T. CAMPBELL. Star-fish (*Asterias* sp.), Great Egg Harbor Bay, N. J.
H. W. FOWLER. Collection of Crustacea, Sea Side Park, N. J.
W. J. FOX. Sea-urehin, Sea Isle City, N. J.
H. W. HAND and H. W. FOWLER. Collection of Crustacea, Cape May County, N. J.
MRS. A. F. KENYON. Three jars of invertebrates, Australia; three jars of Crustacea, South Australia.
H. A. PILSBRY. Three invertebrates, New Jersey.
DR. R. J. PHILLIPS and H. W. FOWLER. Small collection of invertebrates, Corson's Inlet, N. J.
PURCHASED. Specimens of *Limulus*.
S. N. RHODS. One tray of shrimps, Riverside, Cal.
LOUIS H. SCHMIDT. Malformed claw of Crab.
U. S. NATIONAL MUSEUM. Seven trays of barnacles, Labrador; seven jars of barnacles, South America.
R. W. WEHRLE. Crayfish (*Cambarus*), Indiana, Pa.

FOSSILS.

- DR. J. C. MERRIAM. Skull of *Canis* sp., California.
ALAN G. SMITH. *Scolithus linearis* in Cambrian quartzite.
DR. STAHLER. Bones of *Belodon*.
JOSEPH WILLCOX. Pliocene Coral, Osprey, Fla.

ETHNOLOGICAL MATERIAL.

- MRS. CHARLES SCHAEFFER. Collection of Ainu wearing apparel and household objects; collection of clothing, personal ornaments and baskets from wild tribes of Formosa.
CHAS. E. BROOKS. Lueayan Indian remains.
F. LYNWOOD GARRISON. Specimen of pottery, Colombia.
CLARENCE B. MOORE. A number of specimens from Indian mounds of Southern States, added to the Clarence B. Moore Collection.

PLANTS.

- ARNOLD ARBORETUM. One hundred and sixty specimens of shrubs and trees.
EDWIN B. BARTRAM. One hundred and fifty plants, Eastern United States.
FRANK W. and HOWARD W. COMMONS, Albert Commons Herbarium. Plants of Delaware.

- DR. C. D. FRETZ. Fifty *Cratægus* from Bucks County, Pa.
ALFRED S. HAINES. *Camptosorus rhizophyllus* and photograph.
MISS PARMALEE. Collection of sea weeds.
PHILADELPHIA BOTANICAL CLUB. Two thousand one hundred and sixty sheets of local plants.
S. L. SCHUMO. Fifteen West Indian plants.
CHARLES S. WILLIAMSON. Fifty plants.
ACADEMY EXPEDITION TO BERMUDA (STEWARTSON BROWN). Two hundred and fifty Bermudan plants.
HEBARD-ACADEMY EXPEDITION. Twenty Western United States plants.
BOTANICAL SECTION. Purchased the following collections:
W. W. EGGLESTON. Forty *Cratægus*.
A. A. HELLER. Five hundred California and Nevada plants.
C. G. PRINGLE. One hundred Mexican plants.

MINERALS.

- MORRIS BREITHAUPT. Non-pyrites in calcite, Philadelphia.
E. S. FITLER. Gold ore, Nevada.
DANIEL FITLER. Gold-bearing quartz, cinnabar ore and samples of sand
CHARLES D. NORTON. Two specimens of galena.
CHARLES E. RONALDSON. Garnets in schist rock, Maine.
ALBERT STEVENS. Several specimens of local rocks.
F. LYNWOOD GARRISON. Ten minerals, various localities.
A. E. OUTERBRIDGE. Series of ores from Jamaica.
WILLIAM S. VAUX COLLECTION. Seventy-five specimens of minerals, purchased.
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